Appendix E: Walk-around Grader Inspection

A Good Operator Takes Care of the Machinery

For maintenance and operator personnel safety, and maximum service life of the machine, make a thorough walk-around inspection when performing lubrication and maintenance work. Inspect under and around the machine for such items as loose or missing bolts, trash build-up, cut or gouged tires; damaged hydraulic lines or hoses; oil, fuel, or coolant leaks; and condition of blade.

The grease gun is a very important maintenance tool.

In addition to routine machine maintenance, it is very important to keep all warning devices clean and visible.

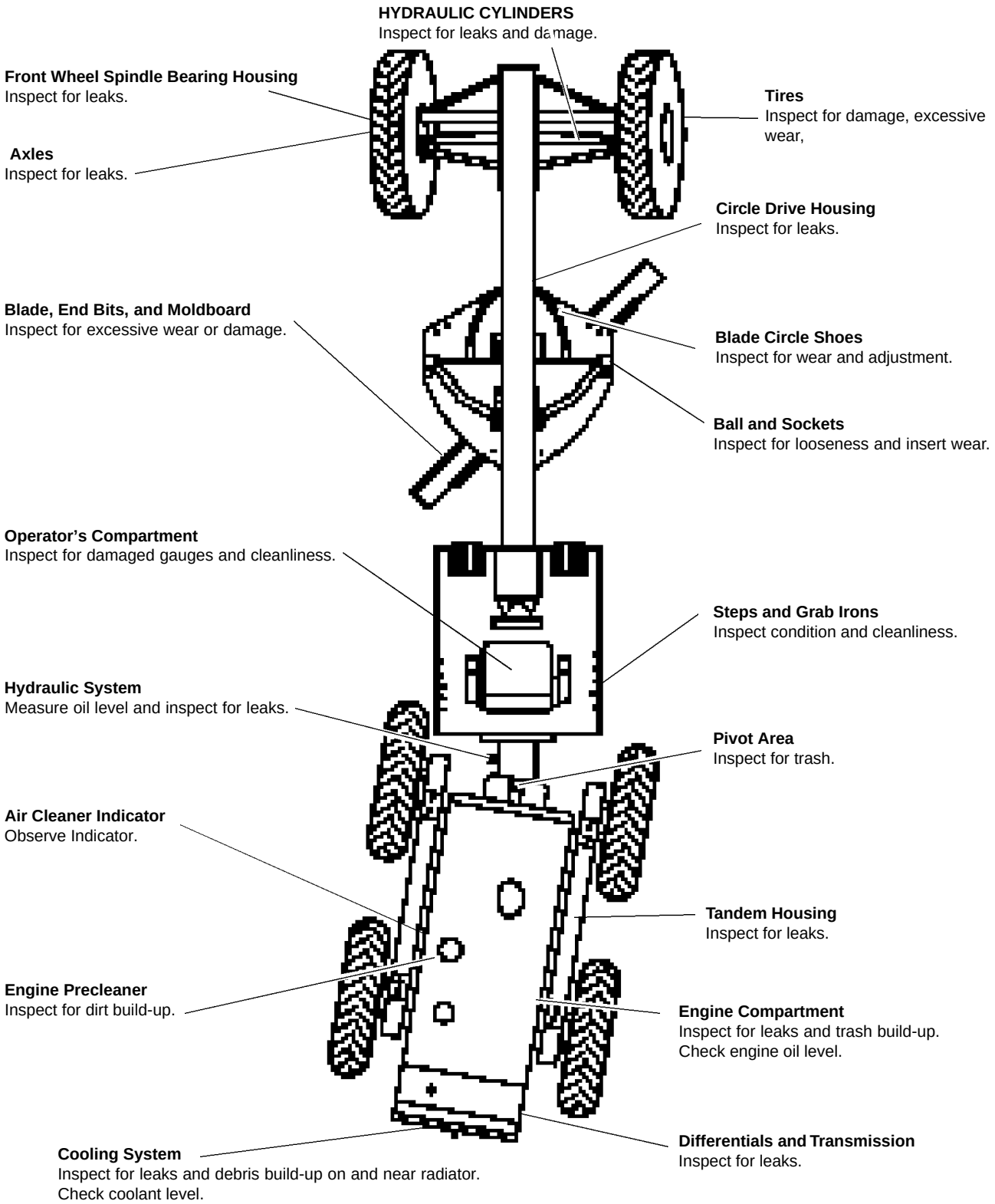

Figure 19: Walk-around Inspection Diagram (From *Maintaining Gravel Roads Training Manual*, 1999. Maine Department of Transportation, Federal Highway Administration.)

MOTOR GRADER PREVENTATIVE MAINTENANCE CHECK LIST

Vehicle #_____ Date _____ PM Location _____ # Hours _____

	OK	REPAIR	FOLLOW UP
150 HOUR SERVICE (90 DAYS)			
Change Engine Oil & Filter	_____	_____	_____
Check Air Filter Elements – replace if necessary	_____	_____	_____
Check Exhaust System	_____	_____	_____
Check Air Inlet System for Leaks	_____	_____	_____
Check Wiring for Chafing, Loose Connections, etc.	_____	_____	_____
Check Battery Electrolyte Level	_____	_____	_____
Check Front End	_____	_____	_____
Check and Tighten Wheel Studs	_____	_____	_____
Check Drive Axle Oil	_____	_____	_____
Check Oil Level in Tandem Drives	_____	_____	_____
Check Parking Brake Adjustment	_____	_____	_____
Check Oil Level in Circle Drive Gear Box	_____	_____	_____
300 HOUR SERVICE			
Change Fuel Filter	_____	_____	_____
Change Hydraulic Filter & Clean Magnets	_____	_____	_____
Change Transmission Filter	_____	_____	_____
Visually Inspect Engine Mounts	_____	_____	_____
Take Oil Sample	_____	_____	_____
Check and Adjust Brake Pedal Linkage	_____	_____	_____
Steam Clean Radiator	_____	_____	_____
1000 HOUR SERVICE			
Steam Clean Engine	_____	_____	_____
Check and Adjust Engine Speeds	_____	_____	_____
Check and Adjust Valve Clearance	_____	_____	_____
Clean and Repack Front Wheel Bearings	_____	_____	_____
Clean Hydraulic Tank Breather Filter	_____	_____	_____
Check Pivot Pins and Bushings	_____	_____	_____
Road Test Prior to Releasing to Using Agency	_____	_____	_____

Performed by_____

Figure 20: Motor Grader Preventative Maintenance Check List (From *Maintaining Gravel Roads Training Manual*, 1999. Maine Department of Transportation, Federal Highway Administration.)